CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) In a wireless communication system, a method for transmitting a ~~control~~ message from a first entity to a second entity, comprising:

~~at the first entity, measuring~~ determining, at the first entity, at least one characteristic of a communication link ~~channel~~ through which a signal is received from the second entity ~~to produce channel state information~~;

forming the ~~control~~ message indicative of ~~the channel~~ a state ~~information~~ of the communication link; ~~and~~

assigning a codeword to the message, the codeword having a minimum distance based at least in part on the state of the communication link; and

transmitting the ~~control~~ message from the first entity to the second entity at a particular power level determined based at least in part on the ~~control~~ message.

2. (Currently Amended) The method of claim 1, wherein the ~~control message comprises a particular~~ codeword is selected from ~~among~~ a plurality of possible codewords.

3. (Currently Amended) The method of claim ~~2~~ 1, wherein the power level is determined based at least in part on a the minimum distance of the ~~selected~~ codeword.

4. (Currently Amended) The method of claim ~~2~~ 1, wherein the power level is determined based at least in part on an expected frequency of the ~~selected~~ codeword being transmitted.

5. (Currently Amended) The method of claim ~~2~~ 1, wherein the power level is determined based at least in part on a particular number of times the ~~selected~~ codeword is repeated for a transmission.

6. (Currently Amended) The method of claim 1, wherein the ~~control~~ message ~~is~~ <u>comprises</u> a data rate control message indicative of a rate for a data transmission requested from the second entity.

7. (Original) The method of claim 1, wherein the at least one characteristic comprises a carrier-to-noise-plus interference ratio (C/I).

8. (Currently Amended) The method of claim ~~1~~ <u>6</u>, wherein the ~~control~~ message is selected from ~~among~~ a plurality of data rate control messages.

9. (Currently Amended) The method of claim ~~2~~ 1, wherein the ~~selected codeword has a~~ minimum distance <u>of the codeword is</u> based <u>at least in part</u> on <u>a signal</u> quality of the <u>communication link</u> ~~channel~~.

10. (Currently Amended) The method of claim ~~2~~ 1, wherein the ~~selected codeword has a~~ minimum distance <u>of the codeword is</u> based <u>at lest in part</u> on ~~frequency in which~~ <u>how frequently</u> the ~~control~~ message is transmitted.

11. (Currently Amended) In a wireless communication system, a method for transmitting a message from a first entity to a second entity, comprising:

identifying a codeword associated with the message, wherein the identified codeword is one of a plurality of codewords defined for an alphabet, and wherein at least two codewords in the alphabet have unequal distances to their nearest codewords; ~~and~~

<u>determining a transmit power level for the identified codeword, based at least in part on a distance of the identified codeword to its nearest codeword in the alphabet; and</u>

transmitting the identified codeword from the first entity to the second entity <u>at the determined transmit power level</u>.

12. (Cancelled)

13. (Cancelled)

14.   (Currently Amended) The method of claim ~~12~~ 11, wherein the transmit power level for the identified codeword is determined to achieve a particular level of performance.

15.   (Original) The method of claim 14, wherein the particular level of performance is approximately one percent frame error rate or better.

16.   (Original) The method of claim 11, wherein the message to be transmitted is one of a plurality of possible messages, and wherein the plurality of codewords in the alphabet are assigned to the plurality of possible messages in accordance with a particular assignment scheme.

17.   (Currently Amended) The method of claim 16, wherein the plurality of codewords in the alphabet are assigned to the plurality of possible messages such that messages ~~more likely~~ to be transmitted at higher transmit power levels are assigned with codewords having larger distances to their nearest codewords.

18.   (Currently Amended) The method of claim 16, wherein the plurality of codewords in the alphabet are assigned to the plurality of possible messages such that messages ~~more likely~~ to be transmitted frequently are assigned with codewords having larger distances to their nearest codewords

19.   (Original) The method of claim 11, wherein the alphabet includes N codewords having minimum distances of d_1 through d_N, and wherein the minimum distances conform to the following:

$$d_1 \geq d_2 \geq \ldots \geq d_{N-1} \geq d_N \text{ , and } d_1 > d_N \text{ .}$$

20.   (Original) The method of claim 11, wherein the message identifies a particular data rate for a data transmission requested by the first entity from the second entity.

21.   (Currently Amended) The method of claim 11, wherein the first entity ~~is~~ comprises an access terminal in the wireless communication system.

22.   (Currently Amended) The method of claim 11, wherein the wireless communication system is comprises a CDMA system.

23.   (Cancelled)

24.   (Cancelled)

25.   (Currently Amended) The method of claim 11 23, wherein the plurality of codewords in the alphabet are associated with a plurality of points in a signal constellation, and wherein at least two points in the signal constellation have unequal distances to their nearest codewords.

26.   (Original) The method of claim 25, wherein the plurality of points in the signal constellation are selected from points in signal constellations for quadrature phase shift keying (QPSK), M-ary phase shift keying (M-PSK), M-ary quadrature amplitude modulation (M-QAM), or a combination thereof.

27.   (Cancelled)

28.   (Cancelled)

29.   (Cancelled)

30.   (Cancelled)

31.   (Currently Amended) An access terminal in a wireless communication system, comprising:

a receiver for configured to receivinge a signal from an access network and determininge at least one characteristic of a forward communication link channel through which the signal is received;

a data processor configured to form a control message indicative of a state of the forward communication link channel and assign a codeword to the message, the codeword having a minimum distance based at least in part on the state of the communication link; and

a transmitter unit configured to transmit the ~~control~~ message at a particular ~~transmit~~ power level determined based at least in part on the ~~control~~ message.

32.   (Currently Amended) An access terminal in a wireless communication system, comprising:

a data processor configured to <u>identify</u> ~~receive and process~~ a codeword ~~for~~ <u>associated with</u> a message, wherein the <u>identified</u> codeword is one of a plurality of codewords defined for an alphabet, and wherein at least two codewords in the alphabet have <u>unequal distances to their nearest codewords</u> ~~may be transmitted with different amounts of energy for a particular level of performance under similar link condition,~~ <u>the data processor further configured to determine a transmit power level for the identified codeword, based at least in part on a distance of the identified codeword to its nearest codeword in the alphabet</u>; and

a transmitter unit operatively coupled to the data processor and configured to transmit the <u>identified</u> ~~processed~~ codeword <u>at the determined transmit power level</u>.

33.   (Cancelled)

34.   (Currently Amended) The access ~~point~~ <u>terminal</u> of claim 32, further comprising:

a signal quality measurement unit configured to receive samples for a received signal and to determine a received signal quality of signals transmitted from one or more transmitting sources, and

wherein the ~~processed codeword is transmitted at a~~ <u>transmit</u> power level ~~based in part on~~ <u>is associated with</u> the received signal quality of a transmitting source to which the <u>identified</u> ~~processed~~ codeword is transmitted.

35.   (Currently Amended) A communication unit in a wireless communication system, comprising:

a receiver configured to receive a signal from a transmitting source and determine at least one characteristic of a communication link through which the signal is received;

a data processor configured to form a message indicative of a state of the communication link and assign a codeword to the message, the codeword having a minimum distance based at least in part on the state of the communication link; and

a transmitter unit configured to transmit the message at a particular ~~transmit~~ power level determined based at least in part on the message.

36.   (Cancelled)

37.   (Currently Amended) An apparatus in a wireless communication system, comprising:

means for receiving a signal from a transmitting source and determining at least one characteristic of a communication link through which the signal is received;

means for forming a ~~control~~ message indicative of a state of the communication link; ~~and~~

means for assigning a codeword to the message, the codeword having a minimum distance based at least in part on the state of the communication link; and

means for transmitting the ~~control~~ message at a particular transmit power determined based at least in part on the ~~control~~ message.

38.   (Cancelled)

39.   (New) The access terminal of claim 31, wherein the power level is determined based at least in part on the minimum distance of the codeword.

40.   (New) The access terminal of claim 31, wherein the at least one characteristic comprises a carrier-to-noise-plus interference ratio (C/I).

41.   (New) The access terminal of claim 31, wherein the message comprises a data rate control message indicative of a rate for a data transmission requested from the second entity.

42. (New) The access terminal of claim 31, wherein the minimum distance of the codeword is based at least in part on a signal quality of the communication link.

43. (New) The access terminal of claim 32, wherein the plurality of codewords in the alphabet are assigned to the plurality of possible messages such that messages to be transmitted at higher transmit power levels are assigned with codewords having larger distances to their nearest codewords

44. (New) The access terminal of claim 32, wherein the plurality of codewords in the alphabet are associated with a plurality of points in a signal constellation, and wherein at least two points in the signal constellation have unequal distances to their nearest codewords.

45. (New) An apparatus in a wireless communication system, comprising:

means for identifying a codeword associated with a message, wherein the identified codeword is one of a plurality of codewords defined for an alphabet, and wherein at least two codewords in the alphabet have unequal distances to their nearest codewords;

means for determining a transmit power level for the identified codeword, based at least in part on a distance of the identified codeword to its nearest codeword in the alphabet; and

means for transmitting the identified codeword at the determined transmit power level.